

## SARL NEWS - SUNDAY 28 SEPTEMBER 2008

You are listening to ZS6SRL, the official Radio Station of the South African Radio League, the National Body for Amateur Radio in South Africa, with a news bulletin transmitted every Sunday at 08:15 CAT in Afrikaans and at 08:30 CAT in English. To listen to a webstream, visit [www.sarl.org.za](http://www.sarl.org.za), click on ARMI and follow the links for details. PLEASE NOTE: for audio via Echolink, connect to ZS0JPL-R.

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Your newsreader this morning is (name), (call sign), on 145,725 and 7,066 MHz from Pretoria with relays on 28,325, 14,235, 10,130, 7,066 and 3,695 MHz SSB, as well as 51,400, 438,825 and 1 296 MHz FM in the Pretoria area. (Other newsreaders please change to suit).

### SILENT KEYS

It is with deep regret that the passing of two radio amateurs must be reported.

Vic Hugo, ZS1LY, a past President of the SARL in 1989, passed away last week after a long illness. His funeral was on Monday 15 September.

Ken Groom, ZR5AAD, passed away after a short illness in Holland, Michigan, USA. He suffered a severe stroke on Sunday 24 August and was diagnosed with a malignant brain tumour and his condition was confirmed as terminal.

Ken was instrumental in securing and establishing the Holland Amateur Radio Club's Ham Radio Tech Centre. Due to his devotion to the club, the Holland Amateur Radio Club house has been renamed the Ken Groom, ZR5AAD Technical & Training Centre.

We extend our sincere condolences to the families and friends of the deceased.

[PAUSE]

In the news today:

THE 2008 BERNARD PRICE MEMORIAL LECTURE

FIRST METEOR SCATTER CONTACT ON 4 METRES

LEARN HOW TO WORK WITH PICs

You are listening to ZS6SRL. Stay tuned for more detail on these and other important and interesting news items.

THE 2008 BERNARD PRICE MEMORIAL LECTURE TO FEATURE "EXPLORING THE FIERY STAR, THE SUN"

The Bernard Price Memorial Lecture Tour this year will be presented by Prof Sami Solanki, a solar physicist and MD of the Max Planck Institute for Solar System Research.

The Sun is a restless star. It shows a wide variety of transient or active phenomena, such as dark sunspots, the continuously changing hot corona, energetic flares and immense coronal mass ejections, together with the associated output of energetic radiation and particles. The variable solar output influences our natural environment, including global climate, and affects an increasing number and variety of technical systems in space and on Earth. In order to uncover the secrets of the Sun a whole armada of spacecraft is flying to different parts of the solar system, with the most exciting missions yet to come. Highlights of recent space missions, including some of the most spectacular movies recorded by them, are presented and plans for future missions are outlined.

The Bernhard Price memorial Lecture will be presented on the following dates: Monday 13 October in Johannesburg, Tuesday 14 October in George, Wednesday 15 October in Port Elizabeth, Thursday 16 October in Durban and Friday 17 October in Cape Town. Visit the South African Institute of Electrical Engineers website at [www.saiee.org.za](http://www.saiee.org.za) for details of times, venue and where to RSVP. Although the lecture is free of charge and open to everyone, it is essential to register.

#### SARL OFFICE CLOSED

The SARL office will be closed on 1 and 2 October and again from 6 to 17 October. For urgent matters, please send an email to [secretary@sarl.org.za](mailto:secretary@sarl.org.za) or leave a voice mail message on the office telephone. During these dates there will be no one at the National Amateur Radio Centre, however, the Secretary will handle emails, faxes and voicemails remotely.

#### FIRST METEOR SCATTER CONTACT ON 4 METRES

On 31 August 2008, Andre Botes, ZS2ACP, in Port Elizabeth and Paul Smit, ZS6NK, in Polokwane made what was probably the first meteor scatter QSO on 4 metres in Africa. The two stations started at 03:00 UTC and completed at 04:18 UTC on 70,200 MHz USB using FSK441. Andre, ZS2ACP, used a modified TenTec 6m transverter running 23 Watt into a 3-element Yagi and Paul, ZS6NK, used a homebrewed transverter running 24 Watt into a 7-element Yagi.

They made another meteor scatter contact during the VHF contest on 21 September. During this contact, Andre used a 5-element Yagi.

FSK441 software is designed for high speed meteor scatter communication using the brief “pings” of signals reflected from the ionized trails of meteors about 100 km above the earth’s surface. Such pings are typically a few dB above the receiver noise and may last from ten to a few hundred milliseconds. By using these brief pings, FSK441 facilitates QSOs in the range 800 to 2 200 km in the amateur 2-metre and other VHF and UHF bands.

The WSJT FSK441 meteor communication software was developed by Jo Taylor K1JT, a 1993 Nobel Laureate in Physics for the discovery of a new type of pulsar, a discovery that has opened up new possibilities for the study of gravitation.

Jo's interest in amateur radio goes back to his teenage years. In an autobiography published at the time of receiving the Nobel prize, he wrote "Among my fondest boyhood memories are collecting stone arrowheads left on that land by its much-earlier inhabitants, and erecting, together with my brother Hal, numerous large, rotating, ham-radio antennas, high above the roof of the three-story Victorian farmhouse. With one such project, we managed to shear off the brick chimney, flush with the roof, much to the consternation of our parents. That incident was one of many practical lessons of my youth, not all absorbed in the timeliest fashion, involving ill-advised shortcuts toward some goal.

Congratulations to Andre, ZS2ACP, and Paul, ZS6NK.

#### LEARN HOW TO WORK WITH PICs AT A SPECIAL RTA EVENT

Learn how to work with PIC's, how to programme them and use them in Amateur Radio projects. A special Radio Technology in Action event will be held at the SARL National Amateur Radio Centre in Gauteng on Saturday 29 November from 09:00 - 13:00. The cost of the course is R200 for SARL members and R300 for non-members. The registration fee includes all parts, software and light refreshments. The course will be presented by John Willescroft, ZS6EF, and is limited to 20 persons.

Please visit [www.sarl.org.za](http://www.sarl.org.za), click on activity and select RTA for details of how to book and the requirements for the course. Space on the course will be allocated in order of registration.

#### MEMBERSHIP LEAPS TO 1 227

This week has again seen a steady growth in renewals. The current membership stands at 1 227.

On 30 September members who have not paid their membership fee will be removed from the database and will have no access to membership services. If you have mislaid your invoice or if it has simply slipped your mind, pay R320 now. For the fees of other grades of membership please call 011 675 2393 or visit [www.sarl.org.za](http://www.sarl.org.za).

This week we welcome the following new members to the SARL:

Japie Venter, ZSL566, Ria Olivier, ZSL573, Karel Kruger, ZSL574, Justin Phillips, ZSL554, Stephen Howell, ZSL555, Desmond Williams, ZSL556, Gabriel Schoeman, ZSL557, John Waberski, ZSL558, and Stephen Stuttard, ZU6ET.

#### CQ HOU KOERS AND JAMBOREE ON THE AIR

The annual CQ Hou Koers activity for the Voortrekker Movement will take place on Friday 17 and Saturday 18 October, while Jamboree on the Air will take place on Saturday 18 and Sunday 19 October 2008. Contact your local Voortrekker Commando, Scout Group and Guide Company and offer your assistance to set up an amateur station at their meeting place or at a campsite. The Voortrekkers, Scouts and Guides can assist in the erecting of antennas, keep the logbook up

to date, do the QSLing chores and of course talk to Voortrekkers, Scouts and Guides in other parts of South Africa and the world.

#### CONTEST NEWS

The second leg of the SARL 80 Metre QSO Party will be run on Thursday 2 October, starting at 19:00 and ending at 22:00 CAT. It is a phone contest in the segment 3,603 to 3,700 MHz and the exchange is your call sign, a RS signal report and a serial number commencing with 001. A contact with a South African station counts 10 points and a contact with a station outside South Africa counts 15 points. The rules can be found in the SARL Contest Manual.

#### BEST WISHES FOR THE HOLY DAYS

We wish all our Jewish members and listeners a happy new year. May you be inscribed and sealed for a good year and be well over the fast.

As the new moon rises, Moslems will be breaking their fast on 30 September. We wish our Moslem members and listeners well over 'Eid ul-Fitr .

#### PROPAGATION REPORT

Hannes Coetzee, ZS6BZP, reports that the expected solar activity will be very low. The geomagnetic field is expected to be mostly at quiet levels until 29 September after which it will rise to unsettled levels until 5 October. The expected Effective Sun Spot number for the coming week will be less than 5. DX conditions will generally be good to the North and poor in the general Northwesterly directions. The good news is that Kobus Olckers has expanded the frequency prediction service to include two South American destinies.

20 m will provide best opportunities for DX. There is a possibility of 15 and 20 m openings towards India from about 12:00 CAT. There is the possibility of weak 40 and 80 m openings to New Zealand at 20:00. From 06:00, 20 m contacts may be possible with Australia. From 08:00, contacts with Peru may be possible for a few minutes. Brazil may be worked on 20 m from 18:00. From 15:00, there may be good 15 and 20 m openings towards Europe. Contacts with the USA East Coast are possible on 15 m at 20:00. 10 MHz is looking promising late afternoon and after dark for the CW and digital enthusiasts.

Local conditions are going to be good on 40 m during the daytime. 80 m may perform well during the early mornings and late afternoons over the shorter distances, e.g. between ZS5 and ZS6. 30 m may perform well during the middle of the day between ZS6 and ZS2. 80 m is the frequency of choice in the evenings. With summer approaching fast it is now an excellent time to make those 80 m contacts for your WAZS before the thunderstorms and static start again.

Remember that this is only a prediction and that HF always has the capability to surprise you, but you will never know unless you switch your rig on, listen and also call CQ.

Please visit [www.spaceweather.co.za](http://www.spaceweather.co.za) for further information.

## DIARY OF EVENTS

02 October SARL 80 m QSO Party; 03 October - Young Ladies meet SA starts;  
04 October - East Rand Flea Market; 08 October - Set up a school station for  
Space Week activity; 16 October Radio Amateur Exam; 17 - 19 October CQ  
Hou Koers and JOTA; 29 November Working with PICs course

SARL News invites clubs and individuals to submit news stories of interest  
to radio amateurs and shortwave listeners. Submit news stories if possible in  
both English and Afrikaans to [www.sarl.org.za/newsinbox.asp](http://www.sarl.org.za/newsinbox.asp) not later than  
the Thursday preceding the bulletin date.

The SARL also invites you to listen to the programme Amateur Radio Mirror  
International, on the air every Sunday morning at 10:00 CAT on 145,750 MHz  
in the Pretoria area with relays on 7 082, 7 205 and 17 590 kHz. For the web  
stream and Echolink by ZS6FCS, visit [www.sarl.org.za](http://www.sarl.org.za), click on ARMI and  
follow the links. A repeat transmission can be heard Mondays at 21:00 CAT  
on 3 215 kHz. Sentech sponsors the ARMI transmissions on the non-amateur  
frequencies.

Dennis, ZS4BS compiled today's South African Radio League news bulletin.

Thank you for listening. 73. /EX